

1. INTRODUCTION

REACH deals with the Registration, Evaluation, Authorization and Restriction of Chemicals and entered into force on June 1, 2007. REACH is designed to further improve the protection of human health and the environment through a clearer and faster identification of certain chemicals. This legislation of the European Union shall apply to all suppliers (inside and outside Europe) who sell, import or manufacture “articles”, i.e. chemicals and / or products with certain chemicals within the European Union.

2. DEFINITIONS

2.1 Substances of Very High Concern

Substances that may have serious and often irreversible effects on human health and the environment can be identified as Substances of Very High Concern (SVHCs) if the criteria are fulfilled. REACH provides a Candidate list with SVHC which is updated approximately every six months;

2.2 The definition of an article

As defined in ECHA’s (European Chemicals Agency) “Guidance on requirements for substances in articles” (https://echa.europa.eu/documents/10162/23036412/articles_en.pdf/cc2e3f93-8391-4944-88e4-efed5fb5112c) “an article is an object made from one or more substances or mixtures which were given a specific shape, surface or design during the production process”. According to the Guidance an article will remain an article, even though articles are assembled or joined together, until they become waste.

3. REACH OBLIGATIONS

3.1 Registration

Manufacturers and importers of substances (on their own, in mixtures or in certain articles) have a general obligation to submit a registration to the European Chemicals Agency for each substance manufactured in or imported to EU/EES in quantities of 1 tonne or more per year and per company.

3.2 Communication

According to REACH regulations we have the duty to inform customers of all our products containing SVHC on the candidate list - if they are present in a concentration of >0.1% of the weight of any article of any component or product. We are required to provide recipients of the article with, as a minimum, the name of the substance in order to allow safe use of the article.

OUR APPROACH**4.1 Code of Conduct for Suppliers**

At Toyota Material Handling Europe (TMHE) we are committed to being the first choice partner for all customers looking for materials handling solutions. We will do this by providing high-quality, innovative products, services and added-value solutions while using resources in a sustainable, socially and environmentally responsible manner. In order to build trust and confidence and to show our commitment to Corporate Social Responsibility (CSR) throughout the entire value chain of our operations, including our suppliers, we ask all our suppliers to agree with our Code of Conduct for Suppliers, which contains following requirements regarding management of substances of concern:

“Suppliers shall comply with any applicable laws and regulations such as REACH¹ and RoHS² prohibiting or restricting the use or handling of specific substances. To ensure safe handling, movement, storage, recycling, reuse, and disposal, Suppliers shall identify, manage and list Substances of Concern as required by each TMHE entity (any presence of such substances shall be reported via prescribed reply form) and comply with applicable labelling laws and regulations for design, manufacturing, recycling and disposal.”

4.2 Informing customers

At TMHE we are committed to the EU’s objective to reduce the number of substances of concern such as SVHC’s in circulation, as well as to transparency towards our customers, we provide this information publicly. Through our ongoing awareness raising efforts with customers on the topic of sustainability, we will direct customers to this page.

At this point in time (7 of March 2018), SVHC on the candidate list have been identified in “articles” contained in products in the table below:

APPENDIX





Appendix 1: Articles that currently contains SVHC




Appendix 2: New manufactured articles that no longer contains SVHC


¹ EU Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

² Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment


APPENDIX 1 Articles that currently contains SVHC

| Product Family | Article | Article Number | Substances of Very High Concern | Comments |
|--|--|-----------------------------|---|--|
| Autoshuttle PAE150 | FX3U-32BL Backup Battery  | 7590719 | The battery contains 1,2-dimethoxyethane (ethylene glycol dimethyl ether, EGDME) | The battery is enclosed inside the PLC inside the electrical box and will never come in contact with the user. For any support or maintenance of the electrical box, the customer should always contact the vendor. |
| Autoshuttle PAE150 | Ultrasonic sensor  | 7590751 | Lead titanium zirconium oxide, CAS-nr 12626-81-2 | The material is in the piezo crystal of the transducer inside the sensor. The material will never come in contact with the user, nor service personnel. |
| BT Reflex RRE120B/140B/160B | Relay  | 7534003 | The contact contains cadmium oxide | According to the material declaration from the supplier of the assembled electronic unit, the article containing the substance will be found on the contacts. It is enclosed in a plastic housing and will therefore not come in contact with the user of the truck under normal use. For any maintenance on the relay, the customer should always contact the vendor. |
| BT Staxio SPE200D/DN SPE120/140/160/200/120L/140L/ 160L/200L/140S SPE120XR/XRD SWE145/160/200/145L/160L/200L/ 140S/120XR SAE160, LAE250 | Motorcontroller  | 7539116-001, 7539116-002 | Some subparts in the motor controller contains Lead-titanium-trioxide CAS-number 12060-00-3, Lead-monoxid CAS-number 1317-36-8, Diboron-trioxide CAS-number 1303-86-2, 1-Methyl-2-pyrrolidine (NMP) CAS-number 872-50-4 | According to the material declaration from the supplier of the assembled electronic unit, the articles containing these substances will be found on the printed circuit board. It is enclosed in a plastic housing and will therefore not come in contact with the user of the truck under normal use. For any maintenance on the motor controller, the customer should always contact the vendor. |

| | | | | |
|--|--|-----------------------------|---|--|
| BT Reflex RRE140H-250H RRE160HR | Motorcontroller | 7577098-001, 7577099-001 | Some subparts in the motor controller contains Lead-titanium-trioxid CAS-nr 12060-00-3, Lead-monoxide CAS-nr 1317-36-8, Diboron-trioxide CAS-nr 1303-86-2, Boric acid 10043-35-3 | According to the material declaration from the supplier of the assembled electronic unit, the articles containing these substances will be found on the printed circuit board. It is enclosed in a plastic housing and will therefore not come in contact with the user of the truck under normal use. For any maintenance on the motor controller, the customer should always contact the vendor. |
| Fleet management | Data Handling Unit (DHU2)  | 7556555 -xxx | Some LEDs contain, 3,5-Tris(oxiranylmetyl)-1,3,5-triazin-2,4,6(1H,3H,5H)-trion (TGIC) with CAS-number 2451-62-9 | According to the material declaration from the supplier of the assembled electronic unit, the articles containing these substances will be found on the printed circuit board. It is enclosed in a plastic housing and will therefore not come in contact with the user of the truck under normal use. For any maintenance on the DHU2, the customer should always contact the vendor. |
| | Some Resistors and Capacitors contain Diboron trioxide with CAS-number 1303-86-2 | | | |
| Hand Pallet Trucks BT Lifter HHL100 | Ultrasonic sensor  | 7590073 | Lead titanium zirconium oxide, CAS-nr 12626-81-2 | The material is in the piezo crystal of the transducer inside the sensor. The material will normally not come in contact with the user, nor service personnel. Unless the transducer is damaged. |
| RRE,OME, OSE, LPE, SPE, LWE, SWE | Lithium battery  | 7577595-001 | 1,2-dimethoxyethane, ethylene glycol dimethyl ether (EGDME) CAS: 110-71-4 | A control assembly contains a lithium battery. The substance is used as a solvent in the sealed batteries. There is no intended release of the substance. Batteries are collected according to the battery directive (2006/66/EC). |
| All trucks | Adhesive labels | several | Reaction mass of DOTE and MOTE: Reaction mass of 2-ethylhexyl-10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-ditia-4-stannatetradecanoate and 2-ethyl-hexyl-10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-ditia-4-stannatetradecanoate | The substance is heat stabilizer of the PVC carrier material. Work is in progress to substitute the substance by the manufacturer. |

| | | | | |
|--|--|--------|--|---|
| OM, OS, LPE | Seal of bearing  | 29882 | Di(2-ethylhexyl) phthalate DEHP CAS: 117-81-7 | The seal is an enclosed part of the steering arm and will not come in contact with the user of the truck under normal use. |
| LRE200, SRE135, SRE135L, SRE160, SRE160L | Q8 Brake Fluid | 755705 | 4,4'-isopropylidenediphenol (Bisphenol A; BPA) CAS: 80-05-7 | This is a hydraulic brake fluid. Service technicians may risk to be exposed for example when aerating the brake system. After 13 th of September the chemical product has been substituted to Q8 Brake Fluid DOT 4+, trucks produced after this date does not contain Bisphenol A. |

APPENDIX 2 New manufactured articles that no longer contains SVHC

| Product Family | Article | Article Number | Substances of Very High Concern | Comments |
|---|---|----------------|---|--|
| Hand Pallet Trucks BT Lifter HHL100 | Contactora  | 7537283 | One subpart contained N,N-dimethylacetamide (DMAC) with CAS-number 127-19-5 | <p>This substance has been substituted 2017-09-27 according to the supplier.</p> <p>Previously it was present in a subpart of an isolation washer out of Nomex® that contained a substance listed on the Candidate List. For more information about the NOMEX® material see DuPont REACH web site: http://reach.dupont.com</p> |
| BT OME 100 W/MW, OMC, OMCW, SPT2.0, SPS 1.6 | Contactora | 153252 | | |
| BT OME 100 W/MW, OMC, OMCW, SPT2.0, SPS 1,6, SL2.0 | Contactora | 153254 | | |
| BT OME 100 W/MW, OMC, OMCW, SPT2.0, SPS 1,6, SL2.0, RRB1-B8, E1-E8, N1-N3, M12-M14 | Contactora | 153255 | | |
| BT OME 100 W/MW, OMC, OMCW, SPT2.0, SPS 1,6, SL2.0, RRB1-B8, E1-E8, N1-N3, M12-M14 | Contactora | 153851 | | |
| BT RRB1-B8, E1-E8, N1-N3, M12-M14 | Contactora | 153852 | | |
| BT OME 100 W/MW, OMC, OMCW, SPT2.0, SPS 1.6 LSV/LSF/LST | Contactora | 154626 | | |
| BT OME 100 W/MW, SPS 1.35 LSV/LSF/LS, LSE200. LAE250, OSE 120CB | Contactora | 226709 | | |
| BT Staxio SSE160D BT Staxio SSE135/160/135L/160L BT Levio LSE200 BT Optio OME100M/MW7W | Contactora | 226710 | | |
| BT Staxio SSE160D BT Staxio SSE135/160/135L/160L BT Levio LSE200 BT Optio OME100M/MW7W | Contactora | 226712 | | |
| BT LRE300/300T | Contactora | 226715 | | |

| Product Family | Article | Article Number | Substances of Very High Concern | Comments |
|--|------------|----------------|---------------------------------|----------|
| BT Reflex RRE120M/140M/160M | Contactora | 226716 | | |
| BT Staxio RWE120 | Contactora | 226717 | | |
| BT Staxio SWE080L | Contactora | 226720 | | |
| BT P24, AL24, LPE 240, SAE140, LAE240, OSE 120/180/250/XP | Contactora | 226721 | | |
| BT LWE100/130, HWE 100 | Contactora | 226722 | | |
| BT Levio LRE300/300T | Contactora | 227741 | | |
| BT Levio LSE200 BT Staxio SSE160D | Contactora | 230888 | | |
| BT Reflex FRE270 BT Vector VCE125/150 | Contactora | 236414 | | |
| BT Levio LWE130/ BT Staxio HWE100/100S | Contactora | 238759 | | |
| BT Staxio SWE080L/100/120/140/120S/120L/ 140L SWE200D BT Levio LWE140/160/180/200/250 | Contactora | 248310 | | |
| BT Levio LWE140/160/180/200/250 BT Staxio SWE080L/100/120/140 BT Levio LPE200/220/250 | Contactora | 248311 | | |
| BT Reflex RRE140-250B/E BT Reflex RRE160R BT Vector VRE125/150 BT Optio OME100H/100HC BT Optio OME120HW/120HWC | Contactora | 249354 | | |
| BT Levio LRE200/ BT Staxio SRE135/SRE160/SRE135L/SRE160 L | Contactora | 257832 | | |
| BT Reflex RRE120B/RRE140B/RRE160B | Contactora | 7540648 | | |
| BT Reflex RRE140H-250H | Contactora | 7580320 | | |
| BT Staxio HWE100/100S, BT Levio LWE130 | Contactora | 7571938 | | |
| BT LRE 200, SRE 135/160 | Contactora | 257831 | | |

| Product Family | Article | Article Number | Substances of Very High Concern | Comments | | |
|--|------------|----------------|---------------------------------|----------|--|--|
| BT LRE 200, SRE 135/160 | Contactora | 257833 | | | | |
| BT OP 1000, OPW1200 | Contactora | 257834 | | | | |
| BT OP 1000, OPW1200 | Contactora | 257835 | | | | |
| BT OP 1000, OPW1200 | Contactora | 257836 | | | | |
| BT OP 1000, OPW1200 | Contactora | 7529344 | | | | |
| BT LPE 200/220/250, PAE150, SWE 140-200, SPE140-200, SPE200DN | Contactora | 7535701 | | | | |
| BT LPE250 | Contactora | 7600012 | | | | |
| BT LPE200/200/250 | Contactora | 7614236 | | | | |
| BT RRE140-250 | Harness | 7507541 | | | Tris(2-chloroethyl) phosphate (TCEP) CAS-number 115-96-8 | This substance has been substituted 2017-10-03 according to the supplier. The tape attached to the harness used to contain this substance. Release to the environment can occur with slow mitigation rate in long life materials. |
| BT Levio LWE140/160/180/200/250 | Harness | 7516554 | | | | |
| BT Staxio SWE080L/100/120/140 | Harness | 7516588 | | | | |
| BT OSE180X /XP | Harness | 7517475 | | | | |
| BT RRE140/160/180/200/250 | Harness | 233582 | | | | |
| BT RRE140/160/180/200/250 | Harness | 7538552 | | | | |
| BT LPE 200 (Orion) | Harness | 7539816 | | | | |
| BT Levio LWE140/160/180/200/250 BT Staxio SWE080L/100/120/140 | Harness | 7540950 | | | | |
| BT Levio LWE140/160/180/200/250 BT Staxio SWE080L/100/120/140 | Harness | 7540951 | | | | |
| BT RRE140/160/180/200/250 | Harness | 7548635 | | | | |
| BT LPE200/220/250 BT SPE120/140/160/200 BT SWE145/160/200 | Harness | 7524346 | | | | |
| BT LPE200/220/250 BT SPE120/140/160/200 BT SWE145/160/200 | Harness | 7521678 | | | | |
| BT LPE200/220/250 BT SPE120/140/160/200 | Harness | 7532358 | | | | |
| BT LPE200/220/250 | Harness | 7538224 | | | | |
| BT LPE200/220/250 | Harness | 7536625 | | | | |
| BT SPE120/140/160/200 | Harness | 7540030 | | | | |
| BT RRE120GRIM/RRE140GRIM/ RRE160GRIM | Harness | 7566687 | | | | |

| Product Family | Article | Article Number | Substances of Very High Concern | Comments |
|---|---------|----------------|---------------------------------|----------|
| BT RRE120B/140B/160B | Harness | 7534649 | | |
| BT RRE120B/140B/160B | Harness | 7535046 | | |
| BT RRE120GRIM/RRE140GRIM/ RRE160GRIM | Harness | 7543377 | | |
| BT RRE180/200/250 | Harness | 7562529 | | |
| BT SWE145/160/200 | Harness | 7540031 | | |
| BT SWE145/160/200 BT Levio LWE140/160/180/200/250 BT Staxio SWE080L/100/120/140 | Harness | 7571377 | | |
| BT Levio LWE140/160/180/200/250 BT Staxio SWE080L/100/120/140 | Harness | 7573837 | | |
| BT Levio LWE140/160/180/200/250 BT Staxio SWE080L/100/120/140 | Harness | 7573840 | | |
| BT RRE140/160/180/200/250 BT VRE125/150, VRE125SF | Harness | 7573848 | | |
| BT Levio LWE140/160/180/200/250 BT Staxio SWE080L/100/120/140 | Harness | 7572589 | | |
| BT SWE145/160/200 BT Levio LWE140/160/180/200/250 BT Staxio SWE080L/100/120/140 | Harness | 7572453 | | |
| BT SWE145/160/200 BT Levio LWE140/160/180/200/250 BT Staxio SWE080L/100/120/140 | Harness | 7579666 | | |
| BT SWE145/160/200 BT Levio LWE140/160/180/200/250 BT Staxio SWE080L/100/120/140 | Harness | 7579667 | | |
| BT Levio LWE140/160/180/200/250 BT Staxio SWE080L/100/120/140 | Harness | 7583456 | | |
| BT LPE200/220/250 | Harness | 7584512 | | |
| BT LPE200/220/250 | Harness | 7584513 | | |
| BT SPE120/140/160/200 | Harness | 7591991 | | |
| BT SWE145/160/200 | Harness | 7593033 | | |
| BT RRE140H/160H | Harness | 7606608 | | |
| BT LPE200/220/250 | Harness | 7605226 | | |
| BT LPE200/220/250 | Harness | 7609129 | | |